

# CH-47 Chinook/Improved Cargo Helicopter (CH-47F)



## MISSION

Transport weapons, ammunition, equipment, troops, and other cargo in support of combat units and operations other than war.

## DESCRIPTION AND SPECIFICATIONS

The CH-47 Chinook/Improved Cargo Helicopter (CH-47F) is an integral component of the Army Vision. The CH-47F program will remanufacture 300 of the current fleet of 431 CH-47D Chinook airframes, incorporate a new digital cockpit, and make changes to the airframe to reduce vibration. The cockpit modifications include a digital data bus that permits installation of enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability, as well as future growth potential. Airframe vibrations, which increase operational and support (O&S) costs and crew fatigue, will be reduced by structural modifications that change the natural frequency of the airframe. A separate, but complementary effort, is the installation of more powerful and reliable T55-GA-714A engines that are an upgraded version of the current T55-L-712. These engines will increase power from 3,750 to 4,777 shaft horsepower, yielding an approximate 3,900 lb improvement over current high altitude/hot day lift performance. Another feature is the deployment of an improved crashworthy extended range fuel system (ERFS II) to enable Chinook self-deployment and extend the operational radius of all other missions. A program is also underway to reduce O&S costs through the joint development with the United Kingdom of a low-maintenance rotor hub.

**Max gross weight:** 50,000 lb

**Max cruise speed:** 170 knots/184 miles per hour

**Troop capacity:** 33 (31 troops plus 2 crewmembers)

**Litter capacity:** 24

**Sling-load Capacity:** 26,000 lb. center hook, 17,000 lb forward/aft hook, 25,000 lb tandem

**Minimum crew:** 3 (pilot, co-pilot, and flight engineer)

## FOREIGN COUNTERPART

Russia: MI-26; United Kingdom: EH-101

## FOREIGN MILITARY SALES

Australia, Egypt, Greece, Taiwan Direct Sales: Korea, Netherlands, Singapore, Spain, and United Kingdom.

## PROGRAM STATUS

### CH-47F program:

**3QFY98** Awarded the engineering and manufacturing development (EMD) contract, slated for completion FY02.

Fielding will be completed during FY00.

### T55-GA-714A Engine:

**1QFY98** Commenced low-rate initial production (LRIP).

First unit equipped.

**2QFY00** Currently fielding for the CH-47D/MH-47D/MH-47E.

### Extended Range Fuel System (ERFS):

**August 28, 1998** Awarded the improved ERFS II production contract. Initial deliveries were deployed in support of operations in Kosovo.

**2QFY00** ERFS received a full materiel release.

## PROJECTED ACTIVITIES

### CH-47F:

**3QFY01** First flight (EMD).

**3QFY03** First LRIP CH-47F delivery.

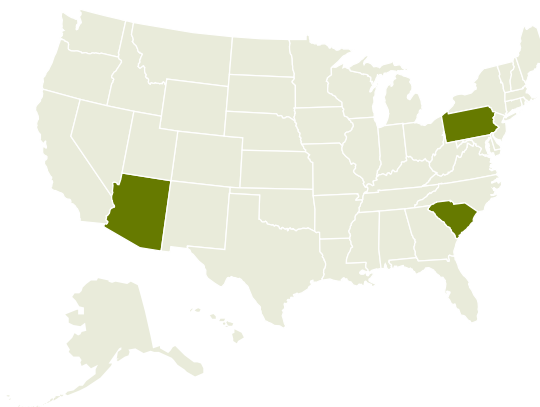
**4QFY04** First unit equipped.

### T55-GA-714A Engine:

**2QFY07** Helicopters slated for completion.

## PRIME CONTRACTORS

Boeing (Philadelphia, PA); AlliedSignal (Greer, SC; Phoenix, AZ); Robertson Aviation (Tempe, AZ)



\* See appendix for list of subcontractors

